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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,407	06/02/2005	Akihiro Miyashita	38036	6757
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EXAMINER HERNANDEZ, NELSON D				
ART UNIT 2622		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/529,407

Applicant(s)

MIYASHITA ET AL.

Examiner

Nelson D. Hernández Hernández

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 May 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The Examiner acknowledges the amended claims filed on November 4, 2008. **Claim 1** has been amended. **Claim 2** has been cancelled.

Response to Arguments

2. Applicant's arguments with respect to **claim 1** have been considered but are moot in view of the new grounds of rejection based on further teaching of the Iijima et al. reference.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima et al., US Patent 6,621,524 B1 in view of Andaashu, JP 2001-285420 A.**
5. **Regarding claim 1**, Iijima et al. discloses an imaging device (*Fig. 1*) including an image pickup unit (*Fig. 1: 2*) and a base image record section (*Fig. 1: 14*) for recording a base image (*In an embodiment of Iijima et al. as shown*

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in fig. 20A (Col. 25, line 50 – col. 26, line 4), Iijima et al. teaches a recorded image (image of the person) that the Examiner is interpreting as the base image that would be combined with the mask image), and having an image processing function of combining a combination object image (image of the car as shown in fig. 20E) and the base image to generate a composite image (this is performed by PCU 21 as discussed in col. 18, line 48 – col. 19, line 5; col. 19, lines 26-31; col. 20, lines 26-62; col. 21, lines 3-42; col. 25, line 62 – col. 26, line 55), the imaging device comprising:

a composite image record section (Flash memory 14 as shown in fig. 1: col. 5, lines 11-28; col. 6, lines 43-53) which records the composite image;

a mask image data record section (Fig. 1: 14B; col. 5, lines 15-28) which records a plurality of types of mask image data representing mask images to specify a combining position of the combination object image (as shown in fig. 20B, a plurality of mask image data can be selected to combine with the base image. Note that the Examiner is reading the image displayed in fig. 20C as the combination of the base image and the mask image data, wherein the area marked with dots is being interpreted as the area that indicated the position of a combination object image (see fig. 20E); col. 25, line 62 – col. 26, line 55) to be combined with the base image on the base image (Note as shown in figs. 20C and 20D, that the mask image is combined on the base image) and an image area for positioning the combination object image (As shown in fig. 20E, the image of the car (which the Examiner is interpreting as the

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combination object image) is being positioned in an area surrounding the area of the base image. Note that the area of the person in fig. 20E is being interpreted as the base image. It is noted that the shape of the mask can be change to any other shape as discussed in Iijima et al. with regards to the mask pattern construction (col. 28, lines 30-44). Therefore, although the shape in the base image appear to be a round star, that particular shape would not preclude one of an ordinary skill in the art to have different shapes and sizes for the mask image data), the mask image data corresponding to the base image (person face as shown in fig. 20E);

a reading unit (*CPU 21*) which reads the mask image data selected from among the plurality of types of mask image data from the mask image data record section (*Col. 18, line 56 – col. 19, line 5; col. 25, line 62 – col. 26, line 55*);

a display unit (*Fig. 1: 20*) which displays a preview image generated by combining the base image and the mask image based on the mask image data read by the reading unit on a display (*See col. 19, lines 15-25; col. 26, lines 11-17. As shown in fig. 19: S25 and fig. 20C, a preview image generated by combining the base image and the mask image is displayed on a display*);

a combination object image holding unit which holds the combination object image in accordance with the mask image of the preview image displayed on the display (*As shown in fig. 20E, CPU 21 would have the combination*

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object image being held in accordance with the mask image of the preview image (20C); col. 25, line 62 – col. 26, line 55);

an image combining unit (*CPU 21 as shown in fig. 1*) which combines the combination object image held by the combination object image holding unit with the base image at the combining position specified by the mask image data (*Iijima et al. teaches combining the base image (Fig. 20A) (as modified with the mask image pattern (Fig. 20B) (modified image as shown in fig. 20C)) and the combination object image (image with the car as shown in fig. 20E) which is being held in the combination object image holding unit at the combining position specified by the mask image data (the combination object image is held at a position surrounding the base image as indicated by the mask pattern). See col. 25, line 62 – col. 26, line 55); and*

a recording unit (*Fig. 1: 14*) which records a composite image combined by the image combining unit in the composite image record section (*Col. 5, lines 15-23; col. 6, line 43 – col. 7, line 5; col. 16, lines 47-63; col. 18, line 48 – col. 21, line 35; col. 23, line 60 – col. 25, line 30; col. 25, line 62 – col. 26, line 55).*

Although in this embodiment of Iijima et al., the combination object image is an image reproduced from the memory of the camera and does not explicitly indicates that the combination object image is an image being picked up by the image pickup unit, Iijima et al. teaches in a different embodiment (*Embodiment 3*) combining a image being picked up with the image pickup unit (*image with the car 21 as shown in figs. 13A-13D*) with a preview image generated by

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combining a base image (*image of a person previously captured and combined with a mask pattern (See figs. 10A-10D)*) to form a composite image (*See col. 19, line 58 – col. 21, line 42*). After acknowledging the concept of combining a through image with a base image modified with a mask pattern as taught in the 3rd embodiment of Iijima et al., one of an ordinary skill in the art would have found obvious at the time the invention was made to modify the teaching in the 6th embodiment of Iijima et al. to use an image that is being picked up as the combination object image. The motivation to do so would have been to improve the imaging device by allowing the user to not only combine pre-recorded image data but to capture and combine image data on the fly thus adding further functionality to the imaging device.

Iijima et al. discloses the invention in a camera but does not explicitly disclose the invention performing the composition apparatus in a mobile telephone.

However, the concept of having mobile telephone performing composition features is known as taught by Andaashu. Andaashu discloses a mobile telephone (*See fig. 1: 6 and fig. 2*) including an image pickup unit (*Fig. 2: 20*) and a base image record section (*Fig. 2: 22*) for recording a base image, and having an image processing function of combining a picked-up image picked up by the image pickup unit and the base image to generate a composite image (*using image processor 21 as shown in fig. 2*), the mobile telephone comprising:

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a composite image record section which records the composite image (*composite images are recorded in image memory 22. See Machine English Translation, page 7, ¶ 0041*);

a mask image data record section (*mask image data is recorded in memory 22 as shown in fig. 2. See Machine English Translation, page 7, ¶ 0035*) which records a plurality of types of template image data (*background image*) representing template images to specify a combining position (*as shown in fig. 4, the template images specify the position of the object to be photographed, i.e. in the case of the background images 1-5, the object should be placed in the center and in the case of background image 6, the object should be placed to the left of the background template*) of a combination object image (*image already stored in memory or being captured in real time*);

a reading unit (*image processor 21 as shown in fig. 2*) which reads the mask image data selected from among the plurality of types of mask image data from the mask image data record section (*See Machine English Translation, page 6, ¶ 0035 – page 7, ¶ 0039*);

a display unit (*Fig. 2: 19*) which displays the mask image based on the mask image data read by the reading unit on a display (*See figs. 4a and 4b; see Machine English Translation, pages 6-7, ¶ 0035*);

a combination object image holding unit which holds the combination object image which is picked up in accordance with the mask image displayed on the display (*See machine English Translation, page 7, ¶ 0040*);

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an image combining unit (*image processor 21 as shown in fig. 2; Machine English Translation, page 7, ¶ 0039-0041*) which combines the combination object image held by the combination object image holding unit with the template image at the combining position specified by the template image data; and

a recording unit (*Fig. 2: 22*) which records a composite image combined by the image combining unit in the composite image record section (*Machine English Translation, page 7, ¶ 0039-0041*) (*Machine English Translation, page 4, ¶ 0018-0023; page 5, ¶ 0027-0030; page 6, ¶ 0033-0035; page 7, ¶ 0038-0042; page 8, ¶ 0045-0048*).

Therefore, taking the combined teaching of Iijima et al. in view of Andaashu as a whole, it would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply the teaching of having a mobile telephone performing an image composition process as taught in Andaashu to modify the teaching of Iijima et al. by having the camera functions incorporated in a mobile telephone. The motivation to do so would have been to improve the capabilities of the camera by having the ability to transmit the captured images to other devices allowing the user to share the images with friend or to store the images in a remote location.

6. **Regarding claim 3**, the combined teaching of Iijima et al. in view of Andaashu as discussed and analyzed in claim 1 further teaches that the plurality of types of mask image data recorded in the mask image data record section

include the mask image data representing a plurality of types of mask images corresponding to the base image (*See Iijima et al.*, col. 16, lines 47-63; col. 18, line 48 – col. 21, line 35; col. 25, line 62 – col. 26, line 55);

wherein the display unit displays the plurality of types of mask images based on the mask image data one at a time on the display until the combination object image which is picked up in accordance with the mask image is held by the combination object image holding unit (*See Iijima et al.*, col. 16, lines 47-63; col. 18, line 48 – col. 21, line 35; col. 23, line 60 – col. 25, line 30; col. 25, line 62 – col. 26, line 55);

wherein the combination object image holding unit holds a plurality of combination object images which are picked up in accordance with the plurality of types of mask images displayed on the display (*See Iijima et al.*, col. 20, lines 25-62, where the user judges whether to confirm the composed image that is displayed; *Iijima et al* also discloses storing a plurality of images created by combining the mask image data with the base image to be used in the image composition function. Since *Iijima et al.* teaches that the base image can be created out of recorded image, when an image that is recorded by using a through image and stored, said stored image can be reused to create a further composite image. This teaches holding a plurality of combination object images which are picked up in accordance with the plurality of types of mask images displayed on the display (col. 8, lines 59-67; col. 9, lines 47-62; col. 13, lines 7-15; col. 25, line 62 – col. 26, line 55)); and

wherein the image combining unit combines each of the plurality of combination object images, held by the combination object image holding unit, with the base image at the combining position based on the mask image to specify the image pickup area of the combination object image (*Iijima et al* discloses that the image combination can be performed to images previously stored in the flash memory with the images created by combining the mask image patter with the base image, this teaches that when the user selects an image that was previously synthesized as a base image to be combined with a different created image, the combining unit is combining each of the plurality of combination object images, held by the combination object image holding unit, with the base image at the combining position based on the mask image to specify the image pickup area of the combination object image; see col. 25, line 36 – col. 26, line 64 in regards to ; see also col. 16, lines 47-63; col. 18, line 48 – col. 21, line 35; col. 23, line 60 – col. 25, line 30; col. 25, line 62 – col. 26, line 55). Grounds for rejecting claim 1 apply here.

7. **Regarding claim 4**, limitations have been discussed and analyzed in claim 1.

8. **Regarding claim 5**, the combined teaching of Iijima et al. in view of Andaashu teaches that when the combination object image which is picked up based on each of a plurality of types of image pickup areas specified by the mask

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image data is already held in the combination object image holding unit, the display unit combines the held combination object image with the base image at the combining position based on the mask image to specify the image pickup area for picking up the held combination object image and displays the composition image on the display (*See Iijima et al., col. 20, lines 25-62; col. 25, line 62 – col. 26, line 55, where the user judges whether to confirm the composed image that is displayed; Iijima et al. also teaches using masks having a plurality of image pick up areas to define a plurality of portions on the base image; see col. 11, lines 41-55, also col. 29, lines 47-60*).

9. **Regarding claim 6**, the combined teaching of Iijima et al. in view of Andaashu teaches that whenever the image pickup unit picks up an image based on the mask image displayed on the display and the picked-up combination object image is held by the combination object image holding unit, the image combining unit combines the held combination object image with the base image in order (*See Iijima et al., col. 20, lines 25-62; col. 18, line 48 - col. 21, line 21; col. 25, line 62 – col. 26, line 55*); and

wherein after the image combining unit combines all the combination object images with the base image, the recording unit records a composite image provided by the image combining unit in the composite image record section (*See Iijima et al., col. 5, lines 15-23; col. 6, line 43 – col. 7, line 5; col. 16, lines 47-63; col. 20, lines 25-62; col. 18, line 48 - col. 21, line 21; col. 25, line 62 – col. 26, line 55*).

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10. **Regarding claim 7**, the combined teaching of Iijima et al. in view of Andaashu teaches that when a picking up of the combination object image to be combined with the base image is canceled on the way, the image combining unit combines the combination object image, which is picked up by the image pickup unit and which is held by the combination object image holding unit before the picking up of the image is canceled, with the base image (*Iijima et al. discloses that the base image that is created by combining a base image with a mask image pattern, can be selected from the memory (14a) where previously stored base images (images created by combining a base image with a mask image pattern) are stored, thus if an image being picked up of the combination object image to be combined with the base image is canceled on the way, the user can select a previously recorded cut-out image to be combined with a base image to create a new synthesized image; col. 16, lines 47-63; col. 18, line 48 – col. 21, line 35; col. 23, line 60 – col. 25, line 30; col. 25, line 62 – col. 26, line 55*).

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is

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filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernández Hernández whose telephone number is (571)272-7311. The examiner can normally be reached on 9:00 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nelson D. Hernández Hernández
Examiner
Art Unit 2622

NDHH
January 26, 2009

/Lin Ye/

Supervisory Patent Examiner, Art Unit 2622